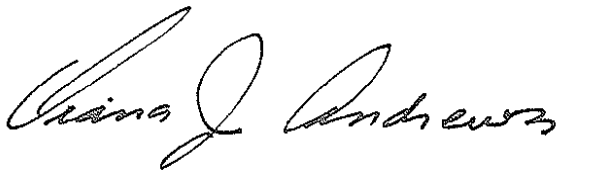
Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

Final

AIR QUALITY PERMIT

Issued under 401 KAR 52:020

Permittee Name:	**Degussa Corporation**
Mailing Address:	**5150 Gilbertsville Highway** **Calvert City, KY 42029**
Source Name:	**Degussa Corporation**
Mailing Address:	**5150 Gilbertsville Highway** **Calvert City, KY 42029**
Source Location:	**Same as above.**
Permit Number:	**V-06-027**
Source A. I. #:	**2931**
Activity #:	**APE 20040001**
Review Type:	**Initial Title V/ Synthetic Minor**
Source ID #:	**21-157-00036**
Regional Office:	**Paducah Regional Office** **130 Eagle Nest Drive.** **Paducah, KY** **(270) 898-8468**
County:	**Marshall**
Application Complete Date:	**December 24, 1998**
Issuance Date:	**October 16, 2006**
Revision Date:	**N/A**
Expiration Date:	**October 16, 2011**



John S. Lyons, Director
Division for Air Quality

Revised 12/09/02

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	Permit type	AI #	Complete Date	Issuance Date	Summary of Action
O-91-020	**Operating**			**April 17, 1991**	**Initial Construction Permit**
C-92-031	**Construction**			**Oct 27, 1994**	**Initial Construction Permit**
S-94-196				**Nov. 7, 1994**	**Operating Permit**
S-95-142				**July 7, 1995**	**Operating Permit**
F-98-025				**Nov. 23, 1998**	**Operating Permit**
V-06-027	**Initial Title V**	**2931**	**December 24, 1998**	**October 16, 2006**	**Title V permit**

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Unit # 1: Hydro De-Sulfurization (HDS) and Other Fixed Bed Catalyst Products.
Emission Unit # 2, EP# 12: Vinyl Acetate Monomer (VAM) and Other Fixed Bed Catalyst Products.
Emission Unit # 3: Bead Process.
Emission Unit # 7 - Belt and Vibrating Dryers.

Emission points:

Main Stack. Process Equipment associated:

1. Alumina Loading and Storage
2. Rotary Calciner RC213A (Process Side)
3. Rotary Calciner RC213C (Electric Heater)
4. Rotary Calciner RC213D (Process Side)
5. Impregnator K101A, K101B, K101C, K101D
6. Kneader KD1004, KD 1005
7. Bucket Elevator BE1008, Extruder, Belt Dryer,
8. Dryer DR101A, DR101B, DR101C, DR1019, New Dryer (Process Side)
9. Screening Bins
10. Silica Bead Hopper.
11. VAM Reaction Vessels
12. Rare Earth Storage Tank A & B
13. Loading, Storage and Packaging.
14. Product Storage Day Bin A,B,C,D

Description: Raw material for HDS and Fixed bed Catalyst Production:

Alumina:	825 kg/hr or 1815lb/hr
Metal Oxides:	200kg/hr or 440lb/hr
Nitric Acid:	60kg/hr or 132lb/hr
Ammonium Hydroxide:	14kg/hr or 31lb/hr
Max. Rated Capacity:	725kg/hr or 1595lb/hr

Raw material for VAM Series Catalyst Production:

Substrate	300lb/hr
Precious/Rare Earth Metal	3lb/hr
Sodium Metasilicate	35lb/hr
Hydrazine	1.5gallon/hr
Ammonium Carbonate	110lb/hr
Potassium Acetate	11lb/hr

Raw material for Bead Process:

Substrate	6000lb/hr
Precious/Rare Earth Metal	2lb/hr
Cerium Acetate	165lb/hr

Vibrating Dryer DR101C
Belt Dryer DR1019
New Dryer (To be installed)
Date of Construction: 1995
Control Device: None

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Equipment and Controls:

Note: X – can be used for that process, Control Device in ( )

Emission Point	Emission Unit # 1 HDS	Emission Unit # 2 VAM	Emission Unit # 3 BEAD
Aluminum Loading & Storage	X (Loading Filters)		
Rotary Calciner RC213A (Process)	X (Scrubber Bag house BF 1060), X (HDS Scrubber AT 1072,1074, 1075), X (East West Bag House F116, F121)	X (HDS Scrubber AT 1072,1074,1075), X (Scrubber Bag house BF 1060), X (East West Bag House F116, F121)	X (Scrubber Bag House BF-1060), X (HDS Scrubber AT 1072,1074, 1075), X (East West Bag House F116, F121)
Rotary Calciner RC213C (Process)	X (Scrubber Bag house BF 1060), X (HDS Scrubber AT 1072,1074, 1075), X (East West Bag House F116, F121)	X (HDS Scrubber AT 1072,1074,1075), X (Scrubber Bag house BF 1060), X (East West Bag House F116, F121)	X (Scrubber Bag House BF-1060), X (HDS Scrubber AT 1072,1074, 1075), X (East West Bag House F116, F121)
Rotary Calciner RC213D (Process)	X (Scrubber Bag house BF 1060), X (HDS Scrubber AT 1072,1074, 1075), X (East West Bag House F116, F121)	X (HDS Scrubber AT 1072,1074, 1075), X (East West Bag House F116, F121), (Scrubber Bag House BF-1060)	X (Scrubber Bag House BF-1060), X (HDS Scrubber AT 1072,1074, 1075), X (East West Bag House F116, F121)
Impregnator K101A, 101B, 101C, 101D	X (HDS Scrubber AT 1072,1074, 1075), X (East West Bag House F116, F121), (Scrubber Bag House BF-1060)	X (HDS Scrubber AT 1072,1074, 1075), X (East West Bag House F116, F121), (Scrubber Bag House BF-1060)	X (HDS Scrubber AT 1072,1074, 1075), X (East West Bag House F116, F121), (Scrubber Bag House BF-1060)
Kneader KD1004, KD1005	X (East West Bag House F116, F121)		
Bucket Elevator, Extruder, Belt Dryer	X (East West Bag House F116, F121)		
Dryer DR101A, DR101B, DR101C, DR 1019, New Dryer	X (East West Bag House F116, F121)	X (East West Bag House F116, F121)	X (East West Bag House F116, F121)
Screening Bins	X (East West Bag House F116, F121)		
Silica Bead Hopper		X (East West Bag House F116, F121)	
VAM Reaction Vessels		X (VAM Scrubber JW07751)	
Rare Earth Storage Tank A & B			X (HDS Scrubber AT 1072,1074,1075)
Loading, Storage and Packaging	X (East West Bag House F116, F121)		
Product Storage Day Bins A, B, C, D			X (East West Bag House F116, F121)
Cooler			X (East West Bag House F116, F121)
Alumina Bead Hopper			X (East West Bag House F116, F121)
Kytron Feeder/Hopper	X (East West Bag House F116, F121)		
Screener SC1037	X (East West Bag House F116, F121)		

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Point	Emission Unit # 1 HDS	Emission Unit # 2 VAM	Emission Unit # 3 BEAD
Surge Bin TN1101	**X (East West Bag House F116, F121)**		
Loading Bin TN1102	**X (East West Bag House F116, F121)**		

Control Device: 1. HDS Scrubber Bag-house, BF-1060 95.0% efficiency
2. NOx Scrubbers: AT1072, AT1074, AT1075: 85.0% efficiency
3. East & West Bag-house: 95.0% efficiency

Date of Construction: VAM Series: 1988
HDS and Bead Process: 1995.

APPLICABLE REGULATIONS:

401 KAR 59:010 New Process Operations constructed after July 2, 1975. Applies to the particulate and visible emissions from screening, packaging, shipping and storage bins and tanks.

1. Operating Limitations:
None

2. Emission Limitations:

a. Mass Emission Limit - Pursuant to 401 KAR 59:010, Section 3(2),

For process rates 1,000 lb/hr or less: $E = 2.34$
For process rates greater than 1,000 lb/hr up to 60,000 lb/hr: $E = 3.59P^{0.62}$

Where E = rate of emissions in lb/hr, and
P = process weight in tons/hr

b. In order to preclude the applicability of 401 KAR 51:017, the NOx emissions form the HDS scrubber shall not exceed 37.5 tons per year.

c. Opacity Limit - Pursuant to 401 KAR 59:010, Section 3 (1), the opacity of visible emissions from Main Stack (EP01) shall not equal or exceed 20 % opacity on a 6-mimute average basis, except as follows:

i. Pursuant to 401 KAR 50:055, Section 2(4), the opacity standard does not apply during periods of startup and shutdown.
ii. Pursuant to 401 KAR 50:055, Section 1(1), visible emissions due to shutdown or malfunctions which temporarily exceed the 6-minute standard shall not be deemed in violation of such standards if the requirements of 401 KAR 50:055, Section 1(2) and 1(3) are satisfied, and the Director makes the determinations specified in Section 1(4).

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:

a. Compliance with the particulate emission limit shall be based on the following until any testing results:

Process	Control efficiency	Emission factor, lb PM/ton	Max operating rate Tons/hr
HDS	95%	15.8	1.21
VAM	95%	21.4	0.23
BEAD	95%	32.0	3.1

The HDS Scrubber bag house, NOx Scrubbers (pH and ORP probes), and East & West bag house shall control emissions of particulate and nitrogen oxides. Equipment shall be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all time during the operation.

b. Compliance with the opacity limitation is demonstrated by normal operation of the scrubber bag house, and east & west bag house. If the forming section including impregnator are in operation during any period of malfunction of the scrubber bag house, nitrogen oxide scrubbers, or east & west bag house, the permittee shall determine compliance through visual inspection, EPA Method 9 testing if emissions are seen, and recordkeeping, as required by Item e. under **5. Specific Recordkeeping Requirements below**.

3. <u>Testing Requirements</u>:

a. As noted below, pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted within 6 months of issuance of the final permit.

EPA Reference Method 5 or equivalent shall be performed to determine the amount of PM emissions per hour and per ton of feed to the forming and finishing section.

b. See General Condition **D**.1.

4. <u>Specific Monitoring Requirements</u>:

The permittee shall maintain, calibrate and operate according to manufacturer's specification, monitoring devices for the continuous measurement of:

a. The chemical (sodium hydroxide, sodium thiosulfate) flow rate to the nitrogen oxide scrubbers- AT1072, AT1074, AT1075
b. The differential static pressure across the scrubber bag house.
c. The differential static pressure across the East & West bag house.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Routine and non-routine maintenance of the nitrogen oxide scrubbers.
b. Type and amount of Nitrogen containing raw material used in the catalyst production.
c. Twelve month rolling total of NOx emissions.
d. Records (on strip chart recorder, electronic data acquisition system or equivalent) of the nitrogen oxide scrubber units operating parameters.
e. Amount of reagent added to the nitrogen oxide scrubbers averaged over a period that covers a complete operation of the batch process.

6. Specific Reporting Requirement:

None

7. Specific Control Equipment Operating Conditions:

a. Adding of nitrogen oxide scrubber reagents shall be maintained within +/-20% of the throughput rate determined during the last system calibration.
b. The pH and Oxidation Reduction Potential (ORP) meters in the nitrogen oxide scrubbers shall be tested and calibrated, at least every six calendar months.
c. The scrubbers shall be operational at their best performance during catalyst manufacturing process- batch or continuous.

8. Alternate Operating Scenarios:

None

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit # 4: Precious Metal Catalyst (PMC) Process.

Emission Points: EP 11: PMC Stack. Equipment associated with

1. Reactor 0311 and 0347
2. Sodium Carbonate Tank 0305 A/B
3. N2H4 Tank and Storage tank.
4. Dryer 0317
5. Reducing Agent
6. Precious Metal Dilution Tank 0308
7. Ammonium Sulfide Tank 0502
8. Holding Tank 0313
9. Sulfiding Tank 0351
10. Centrifuge 0315/0375
11. Blender 0356
12. Waste water holding tank

Description: Raw material Used:

Substrate	125 kg/hr	or	275 lb/hr
Reducing Agent	10 liters/hr	or	3 gals/hr
Sulfiding Agent	10 liters/hr	or	3 gal/hr
pH adjuster	30 kg/hr	or	67 lb/hr
Precious/Rare Earth	20 kg/hr	or	45 lb/hr

Date of Construction: 1994
Control Device: None.

APPLICABLE REGULATIONS:

401 KAR 59:010 New Process Operations constructed after July 2, 1975. Applies to the particulate and visible emissions from the PMC stack.

1. Operating Limitations:

None

2. Emission Limitations

a. Pursuant to 401 KAR 59:010, Section 3(2), particulate emissions shall not exceed 2.34 lbs/hr averaged over a period that covers a complete operation of the batch process.

Compliance Demonstration Method:

Compliance is demonstrated by the amount of raw material feed to the process, emission factor calculated by the material balance and stack test conducted in the normal operation of the batch catalyst manufacturing process.

b. Opacity Limit - Pursuant to 401 KAR 59:010, Section 3 (1), the opacity of visible emissions from PMC Stack (EP11) shall not equal or exceed 20 percent.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:

Compliance is demonstrated by normal operation of the material recovery system.

3. **Testing Requirements:**
None

4. **Specific Monitoring Requirements:**
None

5. **Specific Recordkeeping Requirements:**
The permittee shall maintain records of the amount of raw material used in the PMC process of manufacturing catalyst each calendar month (tons/month).

6. **Specific Reporting Requirements:**
None

7. **Specific Control Equipment Operating Conditions:**
None

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit # 5: GEMX Process.

Emission Points:

EP 14: GEMX Stack. Equipments associated with:

1. Receiver 2014 and 2024
2. Solution Tanks 2000,2010,2020.
3. Blender/dryer 2030

EP 16: Product Recovery Exhaust, Equipments associated with:

1. Raw Material Handling
2. Hopper 2050
3. Screener 2051

Description:
Raw material Used:

Substrate	45 kg/hr	or	99 lb/hr
Acidic Base Precious metals	70 kg/hr	or	165 lb/hr
Nitric Acid	74 kg/hr	or	163 lb/hr

Date of Construction: 1994.
Control Device: Nitrogen oxide scrubber (2080).

APPLICABLE REGULATIONS:

401 KAR 59:010 New Process Operations constructed after July 2, 1975.

1. Operating Limitations:

None

2. Emission Limitations

a. The total emission of NOx from Precious Metal Vacuum Receiver (2014, 2024), Mix Tank 2 and 3 (2010 and 2020) and Blender Dryer (2030) shall not exceed 37.3 tons per year [Ref. Permit # F-98-025] in order to preclude applicability of 401 KAR 51:017.

Compliance Demonstration Method:

The permittee shall demonstrate compliance with the NOx emission limit by monitoring the feed rate of nitrogen-containing salts to the process, maintaining proper operation of the nitrogen oxide scrubber unit, and calculating the amount of NOx emissions each month and the rolling 12-month total.

The nitrogen oxide scrubber control efficiency shall be based on the Division approved performance test.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. Pursuant to 401 KAR 59:010, Section 3(2), particulate emissions shall not exceed 2.34 lbs/hr averaged over a period that covers a complete operation of the batch process.

Compliance Demonstration Method:

Compliance shall be demonstrated by the amount of raw material feed to the process, an emission factor calculated by the material balance, and stack test results conducted in the normal operation of the batch catalyst manufacturing process.

c. Pursuant to 401 KAR 59:010, Section 3(1), visible emissions shall not equal or exceed 20% opacity on a 6-minute average basis.

Compliance Demonstration Method:

Compliance is demonstrated by normal operation of the material recovery systems.

3. Testing Requirements:

A performance test using the Reference Methods specified in 401 KAR 50:015 shall be conducted once during the term of the permit. The outlet concentration of NOx from the nitrogen oxide scrubber shall be determined using Division approved methods. The mass input rate of NOx to nitrogen oxide scrubber unit shall be determined by monitoring the feed rate of nitrogen-containing salts to the process units exhausting to scrubber unit during the testing. Control efficiency of the scrubber unit shall be determined and used to demonstrate compliance with the emission limitations.

4. Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

a. Monthly throughput of nitrogen containing salt and acid to the process units.
b. Amount of reagent added to the nitrogen oxide scrubber.
c. Permittee shall monitor pH and Oxidation Reduction Potential (ORP) in the nitrogen oxide scrubber.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Routine and non-routine maintenance of the nitrogen oxide scrubber unit.
b. Type and amount of nitrogen containing raw material used in catalyst production.
c. Twelve (12) month rolling total of NOx emissions.
d. Amount of reagent added to the nitrogen oxide scrubber unit averaged over a period that covers a complete operation of the batch process.

6. Specific Reporting Requirements:

None

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

7. <u>Specific Control Equipment Operating Conditions</u>:

a. Adding of nitrogen oxide scrubber reagents shall be maintained within +/-20% of the throughput rate determined during the last system calibration.
b. The pH and Oxidation Reduction Potential (ORP) meters in the nitrogen oxide scrubbers shall be tested and calibrated, at least every six calendar months.
c. The scrubbers shall be operational at their best performance during catalyst manufacturing process- batch or continuous.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit #6: Calciners (Combustion Vents)

Emission Points: EP-02 and EP-13

Combustion Vents: Equipment associated with:

Rotary Calciner- RC213A
Rotary Calciner- RC213D

Date of Construction: 1988
Control Device: None

APPLICABLE REGULATIONS:

401 KAR 59:015 New indirect heat exchangers, applicable to affected facilities with a capacity of 250 mmBtu per hour heat input or less commenced after August 9, 1972.

1. **Operating Limitations:**
None

2. **Emission Limitations:**
a. Particulate Emission Limit – Pursuant to 401 KAR 59:015, Section 4 (1), particulate emissions shall not exceed 0.56 lb per mmBtu actual heat input.

b. Sulfur Dioxide Emission Limit – Pursuant to 401 KAR 59:015, Section 5, sulfur dioxide emissions shall not exceed 3.0 lb per mmBtu actual heat input.

c. Opacity Limit - Pursuant to 401 KAR 59:015, Section 4 (2), the opacity of visible emissions from Combustion Vents shall not equal or exceed 20 percent.

Compliance Demonstration Method:
Compliance is demonstrated for the particulate matter and sulfur dioxide standards, since the potential emission rates are less than the allowable for natural gas combustion. Compliance is demonstrated for the opacity standard by combustion with natural gas.

3. **Testing Requirements:**
None

4. **Specific Monitoring Requirements:**
None

5. **Specific Recordkeeping Requirements:**
The permittee shall maintain records of the amount of natural gas burned each calendar month (mmBtu/month).

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:
None

7. Specific Control Equipment Operating Conditions:
None

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	Description	Generally Applicable Regulation
1.	Copper Sulfate Tank T-417	None
2.	Formaldehyde Tank T-418	401 KAR 63:020
3.	Caustic Tank T-2084	None
4.	Copper Sulfate Dosing Tank TK0427	None
5.	Formaldehyde Dosing Tank TK0426	401 KAR 63:020
6.	Caustic Dosing Tank T 0425	None
7.	Plating Vessels V0410/415	None
8.	Filters F0400/416	None
9.	Dryers D-0300	None
10.	Calciner D-384	None
11.	Ammonia Tank (T-1700)	None

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. PM, NOx and SO_2 emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
    a. Date, place as defined in this permit, and time of sampling or measurements;
    b. Analyses performance dates;
    c. Company or entity that performed analyses;
    d. Analytical techniques or methods used;
    e. Analyses results; and
    f. Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
    a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
    b. To access and copy any records required by the permit:
    c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

    Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
    a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
    b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.

8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within *30 days*. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6 [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
    a. Identification of the term or condition;
    b. Compliance status of each term or condition of the permit;
    c. Whether compliance was continuous or intermittent;
    d. The method used for determining the compliance status for the source, currently and over the reporting period.
    e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Paducah Regional Office
130 Eagle Nest Drive
Paducah, KY 42003

U.S. EPA Region 4
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

11. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

SECTION G - GENERAL PROVISIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
   a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
   b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
   c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

   Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Any condition or portion of this permit, which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].

11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency.

13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].

14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].

15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

SECTION G - GENERAL PROVISIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
    a. Applicable requirements that are included and specifically identified in the permit and
    b. Non-applicable requirements expressly identified in this permit.

17. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].

2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).

2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G - GENERAL PROVISIONS (CONTINUED)

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements
None

(e) Acid Rain Program Requirements
If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
   a. An emergency occurred and the permittee can identify the cause of the emergency;
   b. The permitted facility was at the time being properly operated;
   c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
   d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
   e. This requirement does not relieve the source of other local, state or federal notification requirements.

2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].

3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

   RMP Reporting Center
   P.O. Box 1515
   Lanham-Seabrook, MD 20703-1515.

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION H - ALTERNATE OPERATING SCENARIOS

None.

SECTION I - COMPLIANCE SCHEDULE

None.